

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Previously Presented) An isolated nucleotide sequence comprising SEQ ID No. 1, SEQ ID No. 2, SEQ ID No. 3, SEQ ID No. 4, SEQ ID No. 5, SEQ ID No. 6, SEQ ID No. 7, SEQ ID No. 8, SEQ ID No. 9, SEQ ID No. 10, SEQ ID No. 11, SEQ ID No. 12, SEQ ID No. 13, SEQ ID No. 14, SEQ ID No. 15, SEQ ID No. 16, SEQ ID No. 17, SEQ ID No. 18, SEQ ID No. 19, SEQ ID No. 20, SEQ ID No. 21, SEQ ID No. 22, SEQ ID No. 23, SEQ ID No. 24, SEQ ID No. 25, SEQ ID No. 26, SEQ ID No. 27 or SEQ ID No. 28.

2-7. (Cancelled).

8. (Previously Presented) A method for genotypically diagnosing cavernomas in an individual, wherein the method comprises providing a biological sample from said individual, and detecting the presence of a mutation in a *Krit1* gene nucleic acid sequence present in said sample, wherein said mutation is linked to the occurrence of cavernomas.

9. (Previously Presented) The diagnostic method as claimed in claim 8, wherein the nucleic acid sequence is genomic DNA, cDNA or mRNA.

10. (Previously Presented) The diagnostic method as claimed in claim 8, wherein said detecting comprises hybridization.

11. (Previously Presented) The diagnostic method as claimed in claim 8, wherein said detecting comprises sequencing.

12. (Previously Presented) The diagnostic method as claimed in claim 8, wherein said detecting comprises SSCP or DGGE.

13. (Previously Presented) The diagnostic method as claimed in claim 8, wherein said detecting comprises detecting the truncation of a protein.

14. (Previously Presented) The diagnostic method as claimed in claim 8, wherein all or part of the nucleic acid sequence corresponding to the *Krit1* gene is amplified prior to detecting the presence of a mutation.

15. (Previously Presented) The diagnostic method as claimed in claim 14, wherein the amplification is carried out by PCR or PCR-like amplification.

16. (Previously Presented) The diagnostic method as claimed in claim 15, wherein the amplification is primed by a pair of nucleotide sequences according to claim 1.

17 and 18. (Cancelled).

19. (Previously Presented) A vector for expression in a suitable host cell, wherein the vector comprises a sequence of the *Krit1* gene or a sequence derived from the *Krit1* gene.

20. (Previously Presented) The expression vector as claimed in claim 19, wherein the vector comprises elements required for the overexpression of the sequence.

21. (Previously Presented) The vector as claimed in claim 20, wherein the vector is a gene therapy vector.

22. (Previously Presented) The vector as claimed in claim 19, wherein the vector further comprises a sequence for tissue-specific targeting and/or expression.

23. (Previously Presented) A therapeutic composition, comprising normal or modified Krit1 protein.

24. (Cancelled).

25. (Previously Presented) The diagnostic method as claimed in claim 16, wherein the pair of nucleotide sequences is

SEQ ID No. 1 and SEQ ID No. 2,
SEQ ID No. 3 and SEQ ID No. 4,
SEQ ID No. 5 and SEQ ID No. 6,
SEQ ID No. 7 and SEQ ID No. 8,
SEQ ID No. 9 and SEQ ID No. 10,
SEQ ID No. 11 and SEQ ID No. 12,
SEQ ID No. 13 and SEQ ID No. 14,
SEQ ID No. 15 and SEQ ID No. 16,
SEQ ID No. 17 and SEQ ID No. 18,
SEQ ID No. 19 and SEQ ID No. 20,
SEQ ID No. 21 and SEQ ID No. 22,
SEQ ID No. 23 and SEQ ID No. 24,
SEQ ID No. 25 and SEQ ID No. 26, or
SEQ ID No. 27 and SEQ ID No. 28.

26. (New) The diagnostic method as claimed in claim 8, wherein said *Krit1* gene mutation is detected in at least one exon of the *Krit1* gene.